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PATENT

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No.: SCHLUMMER-2

In re Application of:	)
CHRISTIAN SCHLUMMER	)
Appl. No.: 10/531,748	)
Filed: April 18, 2005	)
For: DEVICE AND METHOD FOR THE	)
MANUFACTURE OF FOAMED PLASTIC	)
PARTS BY AN INJECTION MOLDING	)
METHOD UTILIZING DYNAMIC	)
MIXING ELEMENTS	)

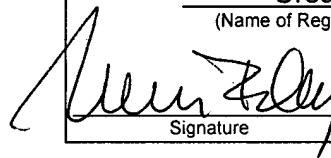
## INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450", on **July 14, 2005**  
(Date)

Ursula B. Day

(Name of Registered Representative)

  
Signature

July 14, 2005  
Date of Signature

S I R:

In accordance with 37 C.F.R. 1.56, applicant wishes to call the attention of attention of the Examiner to the references listed on enclosed form PTO-1449 which were cited in the instant specification and in the International Search Report issued by the European Patent Office with regard to the corresponding International patent application No. PCT/EP2003/11197, respectively. Applicant does not admit that any of the cited documents constitutes prior art against the pending application.

Copies of these references are submitted herewith along with form PTO-1449. The Examiner is requested to initial the attached form PTO-1449 and to return a copy of the initialed document to the undersigned as an indication that the attached references have been considered and made of record.

- ☒ This Information Disclosure Statement is filed within three months of the filing date of a national application other than a continued prosecution application under 1.53(d), so that no fee under 37 C.F.R. §1.97 is due.
- ☐ This Information Disclosure Statement is filed within three months of the date of entry of the national stage as set forth in 1.491 in an international application, so that no fee under 37 C.F.R. §1.97 is due.
- ☐ This Information Disclosure Statement is filed before the mailing of a first Office Action on the merits, so that no fee under 37 C.F.R. §1.97 is due.
- ☐ This Information Disclosure Statement is filed before the mailing of a first Office Action after the filing of a request for continued examination under §1.114, so that no fee under 37 C.F.R. §1.97 is due.
- ☐ This Information Disclosure Statement is filed after the issuance of a first office but before issuance of a final action under §1.113, or a notice of allowance under §1.311.
- ☐ This Information Disclosure Statement is submitted after the mailing of a final action or a notice of allowance, but before payment of the issue fee.
- ☐ The undersigned submits the following statement requesting consideration of this statement:
- The undersigned hereby states:
- ☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement;
- ☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the statement

after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in §1.56(c) more than three months prior to the filing of the information disclosure statement.

☐ The fee of \$180.00 set forth in 1.17(p).

☒ The Commissioner is hereby authorized to charge the fee as set forth in 1.17(p), and any additional fees which may be required, or credit any overpayment to Deposit Account No. 06-0502.

☒ The Commissioner is hereby authorized to charge any fees which may be required, or credit any overpayment to Deposit Account No. 06-0502.

In order to satisfy the requirement under 37 C.F.R. §1.98(a)(3) for a concise explanation of the relevance of each item of information, applicant herewith submits a copy of the International Search Report. In addition, applicant notes with respect to any information that is not in English language as follows:

European publication No. EP 1 356 420 A1 corresponds to international publication No. WO 02/054339 of which a copy is enclosed.

German publication No. DE 20 53 646 describes a machine for the treatment of plastic material from a plastic melt having openings for the blowing agent which are configured as injection nozzles and terminate in the distributor head. Through the blowing agent openings, the melt is charged with the blowing agent by means of a jet stream. A preferably ring-shaped slot is located in the melt portion of the screw.

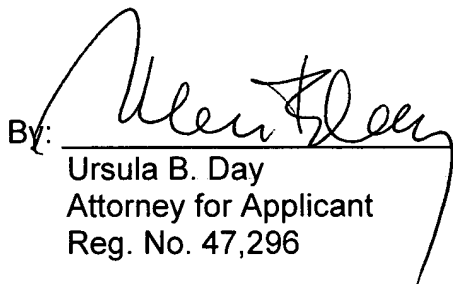
European publication No. 1 256 430 A1 describes a screw with the porous or permeable section of the plasticizing screw situated downstream from the metering zone and fed with blowing agent via a feed system entering the screw shaft. A blowing agent spreads throughout the porous section to enter a broad surface area of melt. A separate claim is made for an injection molding process for production of foamed products in which blowing agent enters the plasticized melt over a broad area via a porous or permeable section of the screw and the homogenized mixture is injected into a mold.

German publication No. DE 101 50 329 A1 describes the production of expanded plastic moulded parts using physical expansion fluids necessitates the diffusion and sorption of an expansion fluid in the thermoplastic melt. Said processes are achieved by intensive blending operations. According to the invention, a static blender (4) is installed in a porous cylinder (1), through whose surface the expansion fluid is brought into contact with the melt. The blending elements in the interior allow the rearrangement of the melt flow, achieving a thorough blending and a shortening of the diffusion paths. The modular blending element thus permits the simultaneous transport of the mass and the intensive thorough blending of the 2-phase blend. The inventive device can be adapted to a conventional injection moulding machine.

The above-identified application discloses and claims an invention patentable over this prior art.

Entry of the references above set forth into the file of the above application is believed to be in order and is respectfully requested.

Respectfully submitted

By:   
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**Form PTO-1449**U.S. Department of Commerce  
Patent and Trademark Office**INFORMATION DISCLOSURE CITATION**

<b>Attorney's Docket No.</b>  <b>SCHLUMMER-2</b>	<b>Applicant</b>  <b>CHRISTI AN SCHLUMMER</b>	<b>Appl. No.</b>  <b>10/531,748</b>
<b>Filing Date</b>  <b>April 18, 2005</b>	<b>Group</b>	<b>Examiner</b>

**U.S. PATENT DOCUMENTS**

Examiner Initial	Document Number	Date	Name	Class	Subclass	Filing Date, if appropriate
	5,297,948	03-29-1994	Sadr			

**FOREIGN PATENT DOCUMENTS**

	Document Number	Date	Country	Class	Subclass	Translation
	DE 2 402 203 A	07-25-1974	Germany			no
	EP 1 072 375 A	01-31-2001	Europe			no
	EP 1 356 420 A1	10-29-2003	Europe			see WO 02/054339
	WO 02/054339	07-11-2002	PCT			yes
	DE 20 53 646	05-10-1972	Germany			no
	EP 1 256 430 A1	11-13-2002	Europe			no
	DE 101 50 329 A1	05-08-2003	Germany			no

**OTHER DOCUMENTS** (Including Author, Title, Date, Pertinent Pages, Etc.)


**Examiner:****Date considered:**

\*Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.